## **AMENDMENTS TO THE SPECIFICATION**

## Page 1, please delete the first full paragraph and replace it as follows:

The present invention relates to an image matching method, and more particularly, to a line based image matching method for retrieving a model image indexed by similar shape describers to a query image from an image database indexed by line based shape describers. The present application is based on Korean Patent Application No. 2000-82756, filed December 27, 2000 U.S. Patent Application Publication No. 20020063718 (corresponding to U.S. Application No. 09/885,171), which is incorporated herein by reference.

AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Patent Application No. 09/884,079

## Page 10, please delete the first full paragraph and replace it as follows:

When the binary relation of a node pair (i, j) of the query image coincides with the binary relation of a label pair  $(\lambda, \lambda')$ , the coefficient  $r_{ij}(\lambda, \lambda')$  is determined as 1. In the present embodiment, the compatibility coefficient  $r_{ij}(\lambda, \lambda')$  is expressed as

$$r_{ij}(\lambda,\lambda') = \frac{1}{1 + \left\| \rho(i,j,\lambda,\lambda') \right\|} \qquad \dots (2)$$

where 
$$\frac{\rho(i,j,\lambda,\lambda') = (\sum_{k=1}^{K} \left\| \xi_{ij}^{(k)} \xi_{\lambda\lambda'}^{k} \right\|^{\alpha})^{1/\alpha}}{\rho(i,j,\lambda,\lambda')} = (\sum_{k=1}^{K} \left\| \xi_{ij}^{(k)} - \xi_{\lambda\lambda'}^{k} \right\|^{\alpha})^{1/\alpha}}, \quad \alpha \text{ is a weighting}$$

factor for labeling neighboring nodes and "K" denotes the number of elements of a character vector for a defined binary relation. In formula (2), " $\rho$ " is a measure of the difference in compatibility between node-label pairs.

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